



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/855,312	05/14/2001	Thomas A. Kodenkandath	05770-156001 / AMSC-554	8789
26161	7590	08/10/2004	EXAMINER	
FISH & RICHARDSON PC 225 FRANKLIN ST BOSTON, MA 02110			BRUNSMAN, DAVID M	
			ART UNIT	PAPER NUMBER

1755

DATE MAILED: 08/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/855,312	Applicant(s) KODENKANDATH ET AL.	
	Examiner David M Brunsman	Art Unit 1755	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 45-50, 59-62, 64, 65, 85, 87 and 89-103 is/are pending in the application.  
     4a) Of the above claim(s) 97-103 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 45-50, 59-62, 64, 65, 85, 87 and 89-96 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 45-50, 59-62, 64, 65, 85, 87 and 89-103 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

Art Unit: 1755

Applicant's response, has been carefully considered. Each of applicant's arguments is specifically addressed below within the body of each individual rejection to which those arguments were directed.

Newly submitted claims 97-103 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

The originally presented claims and claims 97-103 are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful in a process to coat an untextured amorphous surface and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 97-103 stand withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Art Unit: 1755

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 45, 46, 47, 85 and 90-95 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 5071833.

The reference teaches a precursor composition for forming yttrium barium copper oxide superconductors comprising yttrium acetate, barium trifluoroacetate and copper propionate. See column 9, line 7 through column 15, line 2; and examples I-IV. The instant claims are to a composition in the form of a solution. The prior art teaches preferred solvents therein include materials such as THF and lower alcohols (see column 17). The instant specification discloses preferred embodiments of the solvents assumed to form solutions exhibiting the recited properties of the solutions formed including materials such as THF and lower alcohols (page 3, line 17). It is clear that the prior art discloses compositions in the form of solutions comprising similar precursors and similar solvents to those of the instant invention. The properties recited in the instant claims would necessarily exhibit these same properties as the properties of a composition are inseparable from the composition. In the alternative, critical disclosure of limitations necessary to exhibit the recited properties is missing from the instant claims and specification. The mere failure of a reference to disclose all the advantages asserted by applicant is not a substitute for actual difference in properties. *In re DeBlauwe*, 222 USPQ 191. An apparently old composition cannot be converted into an unobvious one

Art Unit: 1755

simply by the discovery of a characteristic that one cannot glean from the cited prior art.

*Titanium Metals Corporation v. Banner*, 227 USPQ 773.

There is nothing in the record highlighting any particular limitation necessary to exhibit the desired use characteristics. The instant claims are only enabled for compositions that inherently exhibit such characteristics. The intended use disclosed by Laine does not exclude the compositions disclosed therein from the scope of the instant claims. Patentability does not depend upon intended use. *Ex Parte Wikdahl*, 10 USPQ2d 1546. In that a similar composition would be expected to exhibit similar properties, there is no reason to believe the compositions of Laine would not satisfy the limitations of the instant claims.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 48, 49, 50, 59-62, 64, 65, 87, 89 and 96 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5071833 as applied above, and further in view of US Patent 5304533.

The difference between US 5071833 and the instant claims is the addition of a Lewis Base such as an amine or ammonia to the composition. US 5304533 teaches that a base such as an amine or ammonia (See claim 6) may be added to metallorganic precursor compositions for forming yttrium barium copper oxide superconductors in order to promote hydrolysis. It would have been obvious to one of ordinary skill in the art to add a base, such as ammonia, to the composition of 5071833 because the prior art

Art Unit: 1755

teaches hydrolysis would be promoted. There providing clear and identified motivation to make the modification suggested. Both processes require hydrolysis of the precursors on the way to oxide formation. A compound known to promote hydrolysis of similar precursors in similar solvents would be expected to promote hydrolysis in the process of the primary reference. No evidence has been presented that one of ordinary skill in the art would not expect said amine or ammonia to promote hydrolysis in the process of the primary reference.

One of ordinary skill in the art is not required to *physically* incorporate Kobayashi into the examples of Laine. A reference is considered for that which it would teach one of ordinary skill in the art. *In re Boe*, 148 USPQ 507, 510; *In re Lamberti*, 192 USPQ 279; *In re Fracalossi*, 215 USPQ 569; *In re Kaslow*, 217 USPQ 1089, 1095. In this instance, one of ordinary skill in the art learns certain compounds promote hydrolysis of precursor similar to those of Laine. The motivation to modify Laine is found in the prior art of clearly and explicitly set forth above.

It is clear that the prior art discloses compositions in the form of solutions comprising similar precursors and similar solvents to those of the instant invention. The properties recited in the instant claims would necessarily exhibit these same properties as the properties of a composition are inseparable from the composition. In the alternative, critical disclosure of limitations necessary to exhibit the recited properties is missing from the instant claims and specification. For example, page 16, lines 5-13 of the instant specification disclose all of the inventive compositions can produce films having a proportion of defects less than 20% and do not set forth any particular limitations necessary to obtain such a result, a disclosure that must rely upon the composition

Art Unit: 1755

necessarily exhibiting the same properties. The mere failure of a reference to disclose all the advantages asserted by applicant is not a substitute for actual difference in properties. *In re DeBlauwe*, 222 USPQ 191. An apparently old composition cannot be converted into an unobvious one simply by the discovery of a characteristic that one cannot glean from the cited prior art. *Titanium Metals Corporation v. Banner*, 227 USPQ 773.

Claims 45, 48 and 90-95 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 5304533.

The reference teaches precursor compositions comprising a rare earth metal salt, an alkaline earth metal salt, copper carboxylate and a base such as an amine or ammonia. See the claims. The instant claims are to a composition in the form of a solution. The prior art teaches preferred solvents therein include materials such as THF and lower alcohols (see column 5, lines 65-66). The instant specification discloses preferred embodiments of the solvents assumed to form solutions exhibiting the recited properties of the solutions formed including materials such as THF and lower alcohols (page 3, line 17).

It is clear that the prior art discloses compositions in the form of solutions comprising similar precursors and similar solvents to those of the instant invention. The properties recited in the instant claims would necessarily exhibit these same properties as the properties of a composition are inseparable from the composition. In the alternative, critical disclosure of limitations necessary to exhibit the recited properties is missing from the instant claims and specification. The mere failure of a reference to disclose all the advantages asserted by applicant is not a substitute for actual difference in properties. *In re DeBlauwe*, 222 USPQ 191. An apparently old composition cannot be converted

Art Unit: 1755

into an unobvious one simply by the discovery of a characteristic that one cannot glean from the cited prior art. *Titanium Metals Corporation v. Banner*, 227 USPQ 773.

There is nothing in the record highlighting any particular limitation necessary to exhibit the desired use characteristics. The instant claims are only enabled for compositions that inherently exhibit such characteristics. The intended use disclosed by Kobayashi does not exclude the compositions disclosed therein from the scope of the instant claims. Patentability does not depend upon intended use. *Ex Parte Wikdahl*, 10 USPQ2d 1546. In that a similar composition would be expected to exhibit similar properties, there is no reason to believe the compositions of Kobayashi would not satisfy the limitations of the instant claims. It is noted claims 97-103 stand withdrawn as nonelected by original presentation.

Claims 59-62, 89 and 96 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 4956340.

The reference teaches a precursor composition comprising a rare earth metal salt, an alkaline earth metal salt, a transition metal salt such as copper propionate and a base such as an amine or ammonia. See column 1, lines 51-59 and example 1. The instant claims are to a composition in the form of a solution. The prior art teaches preferred solvents therein include water (see column 17). The instant specification discloses preferred embodiments of the solvents assumed to form solutions exhibiting the recited properties of the solutions formed including water as a solvent (page 3, line 17).

There is nothing in the record highlighting any particular limitation necessary to exhibit the desired use characteristics. The instant claims are only enabled for compositions that inherently exhibit such characteristics. The intended use disclosed by



Art Unit: 1755

Kimura does not exclude the compositions disclosed therein from the scope of the instant claims. Patentability does not depend upon intended use. *Ex Parte Wikdahl*, 10 USPQ2d 1546. In that a similar composition would be expected to exhibit similar properties, there is no reason to believe the compositions of Kimura would not satisfy the limitations of the instant claims.

It is clear that the prior art discloses compositions in the form of solutions comprising similar precursors and similar solvents to those of the instant invention. The properties recited in the instant claims would necessarily exhibit these same properties as the properties of a composition are inseparable from the composition. In the alternative, critical disclosure of limitations necessary to exhibit the recited properties is missing from the instant claims and specification. For example, page 16, lines 5-13 of the instant specification disclose all of the inventive compositions can produce films having a proportion of defects less than 20% and do not set forth any particular limitations necessary to obtain such a result, a disclosure that must rely upon the composition necessarily exhibiting the same properties. The mere failure of a reference to disclose all the advantages asserted by applicant is not a substitute for actual difference in properties. *In re DeBlauwe*, 222 USPQ 191. An apparently old composition cannot be converted into an unobvious one simply by the discovery of a characteristic that one cannot glean from the cited prior art. *Titanium Metals Corporation v. Banner*, 227 USPQ 773.

Applicant has been advised that should claim 64 be found allowable, claim 87 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one

Art Unit: 1755

claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k). Applicant has not presented contradictory argument thereto and is considered to have conceded that claims 64 and 87 are duplicates.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David M Brunsman whose telephone number is 571-272-1365. The examiner can normally be reached on M, W, F, Sa; 6:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell can be reached on 571-272-1362. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1755

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David M Brunzman  
Primary Examiner  
Art Unit 1755

DMB

A handwritten signature in black ink, appearing to read 'David M Brunzman', with a long horizontal flourish extending to the right.